



Volume 27

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*Counterpoise Editor - Sue Robins AF6LJ*

## What's Happening In Amateur Radio

By Sue Robins AF6LJ

Joe Acevedo N6SIX gave a presentation on the current state of amateur radio gear. The discussion revolved around the new gear that has come on the market in the last year. The dominant force in amateur radio these days is software defined radio, and its emergence into the world of amateur radio. While we have had software defined radio among us for some time from the likes of Flex and Anan Icom stole the show with their IC-7300, an entry level HF / 6 meter radio. Following the entry of the IC-7300 came the IC-7610, and the IC-R8600 receiver. What sets these radios apart is they are software defined, and no computer connection is required, they are stand alone SDRs.

Kenwood has some new HTs that are D-Star compatible. Kenwood brought back a 144,220,440 MHZ D-Star enabled HT to replace the TH-F6 with. The TH-F6 has been with us a long time, and is a favorite among people who run 220 MHZ FM. D-Star and the other digital voice modes used on VHF and UHF are popular in Southern California. DMR, D-Star, Fusion, and P-25 all make a fair showing on the VHF and UHF ham bands these days.

For every one of these modes there are receivers that can decode them. Yaesu's new Fusion radios were mentioned, along with repeater to support them. Fusion with its Wires Internet mode has seen a lot of popularity in Southern California. Holding true with past history in amateur radio no one single digital protocol seems to win out, they all have their followers, and when a ham takes the leap into digital voice, they shall have plenty of people to talk to and someone to "Elmer" them along the way.

The new crop of digital hot spots were mentioned allowing computer access to the various Internet enabled repeaters that run these new digital modes.

Finally the new SDR Play series receivers were discussed, truly powerful receivers for a very low price.

These receivers are only going to get more powerful, and lower in cost as time goes on. It looks like the sky is the limit in terms of all things amateur radio. Thanks Joe for a wonderful presentation.

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Come join us at our next meeting

March 8<sup>th</sup> 2018

At

First Lutheran Church

867 S. Lincoln Ave.

El Cajon, CA

# Another Breed Of Cat

By Sue Robins AF6LJ

There was a time when if you wanted to get on 2 Meter FM you had to either shell out big bucks for one of the few crystal controlled Ham rigs or convert a commercial radio, like a GE Progress Line or a Motorola T-Power for use on the 2 meter ham band. The commercial rigs were cheap and well built, usually not too badly abused by the technicians who worked on them. These radios required some modification to bring tuned circuits into the range of 2 meters. The same was true for the low band radios and the UHF radios. Moving them to their respective amateur bands was a bit of work. That's how it was for a time until low cost import radios hit the market. Some people still preferred the commercial gear just as they do today, however low cost alternatives brought VHF and UHF FM into reach for nearly everyone.

Today many commercial FM radios simply require reprogramming, some though require a little hacking to get them on the ham bands. The commercial radios are preferred by a fair number of amateurs due to their ruggedness, and their reliability.

An area that doesn't see much attention is the area of commercial HF radio. Like their military cousins commercial HF radio has a niche following. The gear is well made and occasionally a bit ahead of amateur radio gear in terms of technology. Icom and Kenwood make HF marine gear, this stuff shows up on E-Bay from time to time. Drake made HF marine gear also. It is not too well known but Swan built commercial HF gear along with Southcom International here in San Diego. Not too well known to most people, even those in the two way radio business is Motorola's HF commercial line of SSB radios. The Micom line of HF SSB radios has been with us since the early 70's that I know of.

The Micom SSB radios don't look much different from their FM counterparts, except on the inside. They are just as rugged and just as reliable as their FM counterparts, they are harder to find, generally cost more, however they usually are ready to be put into amateur service. Many of these radios were used for telemetry and remote control operations.

These radios were sold in a wide variety of configurations. It is more common to find one without a front panel than to find one ready to use as an SSB radio. I was given a pair of Micom 500E headless excitors, one for parts and one with a home brew control head. The radio I have was built in the early 2000's. These radios are software defined radios and can operate on their own or be remotely controlled.

After repairing 2 spectrum analyzers, an HL-2200 rebuild and a few ongoing small projects, it is time to get the Micom on the air. The picture below is of a Mobicat 2E, the Micom 500E control head looks just like this. As I said my radio is "Headless" a control head actually costs more than the rest of the radio, so I will be controlling my radio with a computer. *Stay Tuned.....*



## Next Month's Meeting

### ARES

The program for this meeting will be given by Fred Curtis, KI6GRO. Have you ever wondered about what ARES is? How it operates? How to become a member? When and how ARES is used by the emergency services in San Diego county? How you, an amateur radio operator, gets certified for emergency deployment? Fred has all the answers! Join us for this very informative and interesting program.

**All members and visitors are welcome.**

### ARCEC Repeater Frequencies

2 Meter Repeater	220 MHZ Repeater	440 MHZ Repeater
TX 146.475	TX 222.480	TX 440.900
RX 147.420	RX 224.080	RX 445.900
Offset .945	Offset 1.6	Offset 5.00
PL 107.2	PL 107.2	PL 107.2



## VP Musings... Yuma, Yuma, more Yuma!

I attended the Yuma hamfest February 1617. It was also known as the 2018 ARRL Southwestern Division Convention. There were a lot of attendees!



The number of RV's inside the Yuma fairgrounds was amazing, a lot more than in previous years. The main area was packed and there were more RV's in the side areas and under the roofed parking areas. Most of them had SERIOUS antennas attached.

The swap meet areas were much larger than last year and there were four main rows of radio "candy". There were also other "mini" swap meet areas.



I wandered around all the swap meet areas, but nothing there fit my wallet! There was, however, lots of bargaining going on!



Of course, there were retail vendors inside the main building selling all kind of stuff. This the HRO store from Phoenix was there selling radios and accessories. There were not as many vendors this year as there were last year.



All in all it was a pretty typical Yuma fest! OH! I must tell you that on Friday everyone was entertained by the air planes from the Yuma Marine Air Station. The takeoff path was directly above the hamfest and those planes are not only FAST but are also LOUD! We all got to see the newest fighter, the F35! It looks really "stealthy".

That's about all.

73

Paul – N7PRT

## Donut Net

Monday nights after dinner the Donut Net can be found on the ARCEC VHF repeater. Axel KI6RRN hosts a fun filled net with trivia questions and other activities. The net is a great place to spend that after dinner and before prime TV time. Come and join Axel for fun and fellowship with your fellow hams every Monday at 7:00 PM.

## Support Our Local Businesses



**New Battery Supply & Battery Recycling for SD**

New Marine Battery-Heavy Equipment Battery-Tuck/Auto

619Battery.com

Shop 619-448-5323  
Mobile 619-315-5604 Call/Text

1985 Friendship Dr B  
El Cajon 92020

**Jeff Schwen**

## Club Shirts & Jackets

We have green, pocketed 2013 Field Day club shirts available in sizes S (2), M (1), and L (8) for \$10 each. Our standard Club Shirts have no pocket and are in sizes M (10), L (4), 2XL (7), 3XL (4), 4XL (5) for \$10 each. Sizes are limited to stock on hand.

Lined Windbreaker Jackets are also available in sizes L (1) and XL (7) for \$24 each. These have side pockets with snap closure.

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## Membership Badges & Pins

All members of the Amateur Radio Club of El Cajon who might wish to obtain a membership badge can contact Dell Awards and place an order with them. They are our current preferred source for these badges, and have our logo and design on file and ready to create a custom badge for members. Current price is \$7.50 per badge and they have indicated that there is normally a 3 business day turnaround time. These are quality badges made by a long established company, so place yours on order soon. They can be reached at the below address and phone number, and be sure to mention you saw this blurb in the Counterpoise newsletter too.

**Dell Awards**  
**7949 Broadway**  
**Lemon Grove, CA 91945**  
**(619) 469-2100**  
**Hours: Mon-Fri 9:30am-5:30pm**  
**Sat 10am-1pm**  
**Sun - Closed**

## Club Pins Now Available:

They have arrived! A limited number of club pins are now here and can be obtained from our Treasurer at most club functions. These are 1" diameter pins with a rubber clutch pin on rear. You can now show the world your support of the Amateur Radio Club of El Cajon, and for the small cost of \$3.00 each too. Get them while they are available.





The **AMATEUR RADIO CLUB OF EL CAJON<sup>Inc.</sup>**  
**WA6BGS**  
Founded 1960 ~ Incorporated 1976

Post Office Box Fifty, El Cajon California 92022

Please fill out this form and then see options at bottom for submitting to the club

Date of application: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Amount Paid: \$ \_\_\_\_\_ Cash \_\_\_\_\_ Check \_\_\_\_\_ Check # \_\_\_\_\_

Membership Type: Individual (\$20/year) Family\* (\$35/year)

Membership Status: New Renewal Returning Member

Call Sign \_\_\_\_\_ First Name \_\_\_\_\_ Last Name \_\_\_\_\_

If a previous member, what was your WAMO number?

ARRL Member: Yes No

License Class: Technician General Extra Other

Email Address (required) \_\_\_\_\_

Phone Number (optional) \_\_\_\_\_

*\*Use another sheet of paper to add Family members and please include the following information:*

First Name, Last Name, Call Sign (if any), License Class, Wamo Number (if any), & Email Address.

**Submitting this form:**

To submit this form, you can mail it to:

**Amateur Radio Club of El Cajon  
P.O. Box 50  
El Cajon, CA 92022**

-OR-

Bring it to the next club meeting on the second Thursday of each month. You can find the date and location by getting online at [www.wa6bgs.us](http://www.wa6bgs.us) which is the club website. Check it out for the most current information regarding the club.

**Cash Payments** - Get a receipt from the Club Treasurer. Please make all checks payable to AMATEUR RADIO CLUB of EL CAJON, Incorporated. Receipts for payments by check will be sent by email or regular mail by the Club Treasurer.

Members with an FCC Call Sign are full members with voting privileges. Members without an FCC Call Sign are Associate members without voting privileges.

**YOUR DUES ARE TAX DEDUCTIBLE:** Amateur Radio Club of El Cajon, Inc. Is a 501 C 7 Corporation. Donations are NOT tax deductible.

**Email address and phone number are to allow club officers to contact members regarding club business and information of interest.**